Appendices



Appendix A Tucson Area Additional Services Matrix





					Sells Se	rvice Unit				Pascua Yaqui	Tucson Indian Center	
Program Name	Description	Staff Reqts.	Ajo/Why PSA	Westside	Santa Rosa	San Xavier	Sells	North PSA	Sells Service Unit Additive	Pascua Yaqui	Tucson Indian Center	TOTAL
	2001 Use	er Population	928	817	1,450	8,366	5,807	516	17,884	5,522	1,592	24,998
	2015 Use	er Population	1,108	975	1,763	10,057	6,945	548	21,396	6,642	1,916	29,954
Diabetes												
	24% increase in prevalence by 2015*		050	074	504	4 400	4.004	4.40	4.000	4.000	0	F 00F
	Innova Count of Diabetes Uniques 2001 Diabetes Patie		252	271	531 645	1,499 1,433	1,694 2,532	142	4,389 4,610	1,006 1,456	0	5,395 6,066
	Resulting 2015 Diab		0	0			3,755	0		2,172	0	9,035
	The Diabetes Program provides for the diabetic patient's education and case management and the prospective diabetic patient with preventive education and clinical	Existing Staff	0.0	1.0	0.0	0.0	4.0	0.0	5.0	7.0	0.0	12.0
Diabetes Program	screening. The program is supported clinically with pre- renal examinations and Podiatry care. Envisions a staff of 4 case managers, 2 clinical education staff and 1 help desk staff per 1000 diabetic patients. Prevalence in	Future Plan	2.0	4.0	6.8	14.9	19.3	1.0	48.0	16.0	2.0	66.0
	Navajo is 8% today; 8.3% for Aberdeen, 12.8% for Nashville.	Modeled Number	0.0	0.0	6.8	14.9	26.3	0.0	48.0	15.2	0.0	63.2
	Innova Group Planning Number		2.0	4.0	6.8	14.9	19.3	1.0	48.0	16.0	2.0	66.0
	Supports tribal initiatives to provide services in promotion of healthy outcomes related to diabetes and wellness.	Existing Staff	0.0	2.0	1.0	0.0	3.0	0.0	6.0	PY&	TIC do	6.0
Healthy O'odham	This program is the TON equivalent of Outreach	Future Plan	1.0	1.0	2.0	10.0	5.0	2.0	21.0	not		21.0
Promotion Program (HOPP) Diabetes and Wellness Center Programs. TON utilized 1 additional counselor per 250 increase in User Pop.	Modeled	1.0	2.0	3.0	7.0	10.4	1.0	24.4	HOPP OR Dia		24.4	
Innova Group Planning Number		Number	1.0	1.0	2.0	10.0	5.0	2.0	21.0	& Wel		21.0
	Tobacco prevention and cessation services focus									1		
Tobacco (Supported	primarily on reducing incidents of youth use and possession as well as reducing exposure to second hand smoke. It also encourages tobacco cessation	Existing Staff Future Plan	1.0	1.0	1.0	0.0	1.0	1.0	6.0	2.0	3.0	3.0
by Cardio Grant - diabetes focus)	through education and public awareness events.	Modeled Number							0.0			0.0
	Innova Group Planning Number		1.0	1.0	1.0	1.0	1.0	1.0	6.0	2.0	3.0	11.0
	Outreach Diabetes program promotes proper exercise and nutrition leading to a healthy lifestyle for Native Americans through community outreach, transportation	Existing Staff								0.0	1.0	1.0
Outreach Diabetes	support, community/school screenings, exercise passes/programs and nutrition classes. 1/328 expected	Future Plan									2.0	2.0
	diabetic patients	Modeled Number										6.6
	Innova Group Planning Number	rambor									2.0	8.6
	Wellness Center provides fitness equipment, training, coaching and education for Native Americans of all ages, acting either as an independent service or in support or cooperation with such other programs as	Existing Staff	for T	ON. F	or TIC	e place and Pa utilized	scua Y	'aqui, ti	hese	0.0	2.5	2.5
Wellness Center	Elder Care, Diabetes, CHRs etc. It is for medically prescribed fitness training in support of the health care system. Its staffing is intended to support the medically needy and should not be adequate to operate the	Future Plan								6.0	3.0	9.0
	community gymnasium. In Navajo this was not part of the Diabetes program but in the HPDP program.	Modeled Number								3.0	0.0	3.0
	Innova Group Planning Number									6.0	3.0	9.0
	Case Management provides professional staff dedicated to insuring a continuum of care and follow up for	Existing Staff				0.0			0.0	0.0	0.0	0.0
Case Management	chronically ill or potentially chronically ill patients.	Future Plan	0.0	0.9	0.9	4.2	2.9	0.0	8.9	2.8	0.8	12.5
ouse management		Modeled Number	0.5	0.4	0.7	4.2	2.9	0.2	8.9	2.8	0.8	12.5
	Innova Group Planning Number		0.5	0.9	0.9	4.2	2.9	0.2	9.6	2.8	0.8	13.2
		Existing Staff	0.0	3.0	1.0	0.0	7.0	0.0	11.0	8.0	5.5	24.5
Total D	iabetes Services Staffing	Future Staff	4.5	6.9	10.7	30.1	28.2	4.2	84.6	33.4	10.8	128.8
% of			0.0%	43.5%	9.3%	0.0%	24.8%	0.0%	13.0%	23.9%	50.9%	19.0%

^{*} Boyle, Hunnicutt, Narayan, et al.; Projection of Diabetes Burden Through 2050: Diabetes Care 24: 1936-1940, 2001



	-				Sells Sei	rvice Unit				Pascua Yaqui	Tucson Indian Center	
Program Name	Description	Staff Regts.	Ajo/Why PSA	Westside	Santa Rosa	San Xavier	Sells	North PSA	Sells Service Unit Additive	Pascua Yaqui	Tucson Indian Center	TOTAL
	2001 Use	r Population		817	1,450	8,366	5,807	516	17,884	5,522	1,592	24,998
	2015 Use	er Population	1,108	975	1,763	10,057	6,945	548	21,396	6,642	1,916	29,954
Substance Abuse												
	Innova Count of Unique Patients with	SA dx (2001)	35	45	83	247	353	24	787	62	0	849
	Ratio of Uniques to Us	,	27	18	17	34	16	22	134	89	0	223
Proj. Unique Pa	tients w/ SA Dx year 2015 (1:40 "ASA Uniques		28	24	44	251	174	14	535	166	48	1,005
	Alcohol and Substance Abuse counseling. Nashville Model proposes 1 Unique per 40 User Pop. Tucson	Existing Counselors	0.0	2.0	0.4	2.5	2.0	0.0	6.9	18.0	1.0	25.9
Alcohol &	and i revention 25 orniques per counscior.		1.4	1.8	3.3	10.1	14.1	1.0	31.7	30.0	4.0	65.7
Substance Abuse		Modeled Number	1.4	1.8	3.3	10.1	14.1	1.0	31.7	6.6	1.9	40.2
	Innova Group Planning Number		1.4	1.8	3.3	10.1	14.1	1.0	31.7	30.0	4.0	65.7
	This service provides auricular accupuncture using the NASA 5 pt. protocol. Service is provided to patients with addictions, those in crisis as well as patients involved	Existing Staff			1.0	2.0	4.0		7.0	0.0	0.0	7.0
Acudetox	with the mental health system for whom it may be appropriate/beneficial.	Future Plan	1.0	1.0	3.0	3.0	5.0	1.0	14.0	0.0	2.0	16.0
		Modeled Number							0.0			0.0
	Innova Group Planning Number		1.0	1.0	3.0	3.0	5.0	1.0	14.0	0.0	2.0	16.0
		Existing Staff	0.0	2.0	1.4	4.5	6.0	0.0	13.9	24.0	1.0	38.9
Total S	Substance Abuse Staffing	Future Staff	2.9	3.3	6.8	13.6	19.6	2.5	48.7	36.0	6.0	90.7
		% of Need	0.0%	60.6%	20.5%	33.2%	30.6%	0.0%	28.6%	66.7%	16.7%	42.9%
Community Healt	h Division											
-	Community Health representatives inform community	Existing Staff	1.0	2.0	2.0	1.0	4.0	1.0	11.0	6.0	4.0	21.0
	members about available health services, make referrals to appropriate agencies, and assist PHN staff	-					_					
CHR	with basic health care screening. Also participate in health promotion activities and health fairs.	Future Plan Modeled	2.0	3.0	3.0	3.0	5.0	2.0	18.0	8.0	8.0	34.0
		Number							0.0			0.0
	Innova Group Planning Number		2.0	3.0	3.0	3.0	5.0	2.0	18.0	8.0	8.0	34.0
	WIC Program provides nutrition screening, nutrition education, supplemental food and referral to needed Community resources for pregnant, breastfeeding,	Existing Staff				0.038	5.0		5.0	4.0	0.0	9.0
WIC	postpartum women, infants and children <5 years of age who meet income guidelines (185% poverty) and are found to have a nutritional risk. Utilized 1/2000 (Navajo	Future Plan	2.0	2.0	2.0	2.0	6.0	2.0	16.0	5.0	0.0	21.0
	overall and lower than PY	Modeled Number		1.0	1.2	5.0	3.5		10.7			10.7
	Innova Group Planning Number		2.0	2.0	2.0	2.0	6.0	2.0	16.0	5.0	0.0	21.0
	Maternal and Child Health services exist to provide basic prenatal and childbirth education and support to Native American mothers. These services can include	Existing Staff				0.0			0.0	3.0	0.0	3.0
Maternal Child Health	breastfeeding education/support, home visit evaluations for pre and post natal care, education on topics such as FAS/FAE, car seat use and safety, and nutrition. Utilized 1/2000 (Navajo overall and lower than PY	Future Plan	0.5	0.5	0.5	0.5	0.5	0.5	3.0	5.0	0.0	8.0
	1/2000 (Navajo overali and lower than PY			1.0	1.2	5.0	3.5		10.7			10.7
	Innova Group Planning Number		0.5	0.5	0.5	0.5	0.5	0.5	3.0	5.0	0.0	8.0
	An extension of the care continuum stretching from WIC & Maternal Child Heatlh, focused on enhancing the parent/child relationship while promoting child health	Existing Staff				0.0			0.0	3.0	0.0	3.0
Healthy Families	and preventing child abuse and neglect. Utilized 1/2000	Future Plan	0.5	0.5	0.5	0.5	0.5	0.5	3.0	5.0	0.0	8.0
	(Navajo overall and lower than PY	Modeled Number		1.0	1.2	5.0	3.5		10.7			10.7
	1				i .	1						



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	2015 Use	er Population	1,108	975	1,763	10,057	6,945	548	21,396	6,642	1,916	29,954
	Family Planning/Domestic Violence promotes Native									1	l	
	American health through emphasizing benefits of family planning and supporting such emphases through education, appointment referrals for sterilization	Existing Staff				0.0			0.0	6.0	0.0	6.0
Domestic Violence	procedures, and pre-natal/post-natal home visits to discuss family planning needs; as well as lowering incidents of domestic violence through the provision of	Future Plan	0.5	0.5	0.5	0.5	0.5	0.5	3.0	6.0	0.0	9.0
		Modeled Number							0.0			0.0
	Innova Group Planning Number		0.5	0.5	0.5	0.5	0.5	0.5	3.0	6.0	0.0	9.0
	This service provides natural, traditional and chiropractic services to the community as well as educational	Existing Staff				0.0			0.0	4.0	0.0	4.0
	services related to various health issues. It also seeks to alleviate concerns community members may have	Future Plan	0.5	0.5	0.5	0.5	0.5	0.5	3.0	7.0	0.0	10.0
Alternative Medicine		Modeled Number							0.0			0.0
	Innova Group Planning Number	Number	0.5	0.5	0.5	0.5	0.5	0.5	3.0	7.0	0.0	10.0
	The HIV Prevention Program coordinates all educational services for person who are at high risk for contracting	Existing Staff				0.0	2.0		2.0	2.0	0.0	4.0
	ho virus which causes HIV/AIDS Casemanagement is	Future Plan	0.5	1.5	0.5	0.5	1.0	0.5	4.5	3.0	0.0	7.5
HIV	also provided to those living with the // 100.	Modeled Number							0.0			0.0
	Innova Group Planning Number		0.5	1.5	0.5	0.5	1.0	0.5	4.5	3.0	0.0	7.5
	The TB Program coordinates all services for persons who have or are at risk of having tuberclosis. Provides	Existing Staff				0.0			0.0	0.0	0.0	0.0
TD	direct observatied therapy, edicatopm . Contact investagation and collobrates TB patient serices with the	Future Plan	0.5	1.5	0.5	0.5	0.5	0.5	4.0	0.0	0.0	4.0
TB	Sells Service Unit. TB clinicians, ADHS, and surrounding counties.	Modeled Number							0.0			0.0
	Innova Group Planning Number		0.5	1.5	0.5	0.5	0.5	0.5	4.0	0.0	0.0	4.0
	Patient advocacy, translation services, nutrition counseling, education and treatment coordination in	Existing Staff				0.0	2.0		2.0	0.0	0.0	2.0
Dialysis Support	support of Dialysis Services.	Future Plan	2.0	2.0	2.0	2.0	2.0	2.0	12.0	1.0	0.0	13.0
Dialysis Support		Modeled Number							0.0			0.0
	Innova Group Planning Number		2.0	2.0	2.0	2.0	2.0	2.0	12.0	1.0	0.0	13.0
		Existing Staff	1.0	2.0	2.0	1.0	13.0	1.0	20.0	28.0	4.0	52.0
Total Community	Health Staffing	Future Staff	9.0	12.0	10.0	10.0	16.5	9.0	66.5	40.0	8.0	114.5
% of Nee		% of Need	11.1%	16.7%	20.0%	10.4%	78.8%	11.1%	30.1%	70.0%	50.0%	45.4%
Elder Care Servic	es											
	Elder Care provides an open and supportive environment as well as an outreach program for the	Existing FTE				2.0	25.0		27.0	0.0	0.0	27.0
Elder Care / Senior	community's elders. Lunch distribution, social functions, health education and health benefit counseling is	Future Plan	3.0	3.0	6.0	15.0	20.0	2.0	49.0	2.0	0.0	51.0
Services	provided by the staff. TON utilized 1 FTE/343 users as a ratio (except SX).	Modeled Number							0.0			0.0
	Innova Group Planning Number	radilibei		3.0	6.0	15.0	20.0	2.0		2.0	ļ	



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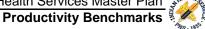
	2015 Use	er Population	1,108	975	1,763	10,057	6,945	548	21,396	6,642	1,916	29,954
Supporting Progr	ams											
	Emergency Medical Services provide emergency	Location No. 1										
	medical services within the boundaries of a service unit. Ambulances are available twenty-four hours a day sever	Existing # of Staff				0.0	19.0		19.0	0.0	0.0	19.0
	days a week, staffed with State Certified EMT, IEMT and Paramedics.	Future # of Staff				0.0	47.0		47.0	0.0	0.0	47.0
		Existing # of Ambulances				0.0	4.0		4.0	0.0	0.0	4.0
Emargana, Madical		Future # of				0.0	6.0		6.0	0.0	0.0	6.0
Emergency Medical Services (EMS)		Ambulances Total				0.0	0.0		0.0	0.0	0.0	0.0
,		Existing # of Staff	0.0	0.0	0.0	0.0	19.0	0.0	19.0	0.0	0.0	19.0
		Future # of Staff	0.0	0.0	0.0	0.0	47.0	0.0	47.0	0.0	0.0	47.0
		Existing # of	0.0	0.0	0.0	0.0	4.0	0.0	4.0	0.0	0.0	4.0
		Ambulances Future # of										
		Ambulances	0.0	0.0	0.0	0.0	6.0	0.0	6.0	0.0	0.0	6.0
	Security is responsible for the safety and well being of hospital patients, visitors, and personnel. It includes	Existing Staff				2.0	7.0		9.0	1.0	0.0	10.0
Security	physical security of parking lots, surrounding grounds, and interiors of the facility.	Future Plan	1.8	5.0	1.8	1.8	5.0	1.8	17.2	5.0	1.0	23.2
Security		Modeled Number							0.0			0.0
	Innova Group Planning Number		1.8	5.0	1.8	1.8	5.0	1.8	17.2	5.0	1.0	23.2
fi a h Bio-Terrorism	The bioterrorism position once selected, is responsible for coordination and planning of emergency response activities, including emerging infectious diseases,	Existing Staff							0.0	0.0	0.0	0.0
	healthcare security systems and associated policy development for the Tucson Area and all service areas within the Tucson Area. In the case of the Tohono O'odham Nation, planning efforts also include the State of Sonora, Mexico.	Future Plan	0.5	0.5	0.5	0.5	1.5	0.5	4.0	0.0	0.0	4.0
		Modeled Number							0.0			0.0
	Innova Group Planning Number			0.5	0.5	0.5	1.5	0.5	4.0	0.0	0.0	4.0
	Transportation Department transports community											
	residents to health related facilities within the service unit, and surrounding cities. It includes all the expenses included for automotive apparation and maintanance and	Existing Staff	7.0	0.0	2.0	7.0	39.0	0.0	55.0	8.0	1.0	64.0
Transportation	incurred for automotive operation and maintenance and the administration of garage and dispatching activities in support of the medical mission.	Future Plan	13.0	14.0	11.0	11.0	30.0	0.0	79.0	7.0	2.0	88.0
		Modeled Number						0.8	0.8			0.8
	Innova Group Planning Number		13.0	14.0	11.0	11.0	30.0	8.0	79.8	7.0	2.0	88.8
	Tribal Health Administration Department oversees and ensures quality health services for service unit residents,	Existing Staff	0.0	0.0	0.0	0.0	4.0	0.0	4.0	0.0	0.0	4.0
Tribal Health	while encouraging more self-reliance and personal control over their health and quality of life.	Future Plan	1.0	1.0	1.0	1.0	4.0	1.0	9.0	0.0	0.0	9.0
Administration		Modeled Number							0.0			0.0
	Innova Group Planning Number		1.0	1.0	1.0	1.0	4.0	1.0	9.0	0.0	0.0	9.0
		Existing Staff	7.0	0.0	2.0	9.0	69.0	0.0	87.0	9.0	1.0	97.0
Total Supporting	Services Staffing	Future Staff	16.3	20.5	14.3	14.3	87.5	4.1	157.0	12.0	3.0	172.0
Total Cupperting Controct Cuaring		% of Need	42.9%	0.0%	14.0%	62.9%	78.9%	0.0%	55.4%	75.0%	33.3%	56.4%
		Existing Staff	8.0	7.0	6.4	16.5	120.0	1.0	158.9	69.0	11.5	239.4
Total Additional S	Services Staffing	Future Staff	35.7	45.7	47.8	83.0	171.8	21.8	405.7	123.4	27.8	557.0
		% of Need	22.4%	15.3%	13.4%	19.9%	69.8%	4.6%	39.2%	55.9%	41.4%	43.0%

Appendices



Appendix B Tucson Area Productivity Benchmarks

Tucson Area

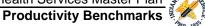


Key Characteristics

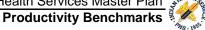
Key Characteristics (KC) are typically the most expensive element within any discipline of care. This table identifies KCs for each discipline as well as the capacity (or productivity benchmark) for each KC.

	Direct Health Care							
Discipline	Workload Units	Key Characteristics (KC)	KC Capacity					
Primary Care								
Family Practice	Visits	Providers Provider Offices	4,512 1 per provider					
Internal Medicine	Visits	Exam Rooms Providers Provider Offices	2 per provider 3,708 1 per provider					
Pediatric	Visits	Exam Rooms Providers Provider Offices	2 per provider in clinic 4,512 1 per provider					
Ob/Gyn	Visits	Exam Rooms Providers Provider Offices	2 per provider in clinic 3,068 1 per provider					
Primary Care Total	Visits	Exam Rooms Providers Nursing Support	2 per provider in clinic 4,200 1.5 per provider					
		Provider Offices Exam Rooms	1 per provider 2 per provider					
Emergency Care								
Emergency	Visits	ER Providers Patient Spaces	4,032 1,938					
Urgent Care	Visits	Providers Provider Offices Exam Rooms	4,800 1 per provider 6,400					
Emergency Care Total	Visits	ER Providers	if <3000 visits then 1, if 3000-9999 then 2.7, if greater than 9999 visits then visits/3101					
		RNs	if <3000 visits then 5.4, if 3000-5440 then 6.3, i greater than 5440 then 9.93 or visits/1501, whichever is greater					
		Patient Spaces	1,938					
Specialty Care								
Orthopedics	Visits	Providers Provider Offices Exam Rooms	2,707 1 per provider 2 per provider in clinic - 60% of time in clinic					
Ophthalmology	Visits	Providers Provider Offices Exam Rooms	3,609 1 per provider 2 per provider					
Dermatology	Visits	Providers Provider Offices Exam Rooms	4,060 1 per provider 2 per provider 2 per provider in clinic - 80% of time in clinic					
General Surgery	Visits	Providers Provider Offices Exam Rooms	2,707 1 per provider					
Otolaryngology	Visits	Providers Provider Offices Exam Rooms	2 per provider in clinic - 60% of time in clinic 2,707 1 per provider 2 per provider in clinic 80% of time in clinic					
Cardiology	Visits	Providers Provider Offices	2 per provider in clinic - 80% of time in clinic 2,100 1 per provider 2 per provider in clinic - 80% of time in clinic					
Urology	Visits	Exam Rooms Providers Provider Offices	2 per provider in clinic - 80% of time in clinic 2,707 1 per provider 2 per provider in clinic - 70% of time in clinic					
Neurology	Visits	Exam Rooms Providers	2 per provider in clinic -70% of time in clinic 1,900					

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		Direc	ct Health Care
	Workload	Key Characteristics	
Discipline	Units	(KC)	KC Capacity
Other Subspecialties	Visits	Providers	1,900
		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Nephrology	Visits	Providers	1,900
		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Allergy	Visits	Providers	1,900
		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Pulmonology	Visits	Providers	1,900
		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Gerontology	Visits	Providers	1,900
		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Gastroenterology	Visits	Providers	1,900
		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Rheumatology	Visits	Providers	1,900
		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Oncology	Visits	Providers	1,900
0 ,		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Pediatric Subspecialties	Visits	Providers	1,900
·		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Pediatric-Genetics	Visits	Providers	1,900
		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Fraditional Healing	Visits	Providers	1,900
· · · · · · · · · · · · · · · · · ·		Provider Offices	1 per provider
		Exam Rooms	2 per provider in clinic - 80% of time in clinic
Specialty Care Sub-Total	Visits	Exam Rooms	2,400
.,		Provider Offices	1 per 2 exam rooms
			·
Total Providers	Visits	Providers	Totals from Above
		Provider Offices	
		Exam Rooms &	
		Patient Spaces	
		· · · · · · · · · · · · · · · · · · ·	
		, amount operation	
<u>, </u>	Dental Comb	·	407404 DOM D
<u> </u>	Dental Service	Providers	167,184 DSM per Dentist
<u>, </u>	Dental Service Minutes	Providers Provider Offices	1 per provider
<u>, </u>		Providers Provider Offices Hygenist	1 per provider .5 per provider
Dental	Minutes	Providers Provider Offices Hygenist Dental Chairs	1 per provider .5 per provider 2.5 per provider
Dental		Providers Provider Offices Hygenist Dental Chairs Optometrist	1 per provider .5 per provider 2.5 per provider 2,008
Dental	Minutes	Providers Provider Offices Hygenist Dental Chairs Optometrist Eye Lanes	1 per provider .5 per provider 2.5 per provider 2,008 2 per provider
Dental De	Minutes Visits	Providers Provider Offices Hygenist Dental Chairs Optometrist Eye Lanes Offices	1 per provider .5 per provider 2.5 per provider 2,008 2 per provider 1 per provider
Dental De	Minutes	Providers Provider Offices Hygenist Dental Chairs Optometrist Eye Lanes Offices Podiatrists	1 per provider .5 per provider 2.5 per provider 2,008 2 per provider 1 per provider 2,707
Dental De	Minutes Visits	Providers Provider Offices Hygenist Dental Chairs Optometrist Eye Lanes Offices Podiatrists Podiatry Offices	1 per provider .5 per provider 2.5 per provider 2,008 2 per provider 1 per provider 2,707 1 per provider
Dental Dental Podiatry	Minutes Visits Visits	Providers Provider Offices Hygenist Dental Chairs Optometrist Eye Lanes Offices Podiatrists Podiatry Offices Exam Rooms	1 per provider .5 per provider 2.5 per provider 2,008 2 per provider 1 per provider 2,707 1 per provider 2 per provider in clinic - 60% of time in clinic
Dental Dialysis Patients	Visits Visits Visits	Providers Provider Offices Hygenist Dental Chairs Optometrist Eye Lanes Offices Podiatrists Podiatry Offices Exam Rooms Dialysis Stations	1 per provider .5 per provider 2.5 per provider 2,008 2 per provider 1 per provider 2,707 1 per provider 2 per provider in clinic - 60% of time in clinic .31 station/patient in 45 hours/week operation
Dental Optometry Podiatry Dialysis Patients	Minutes Visits Visits	Providers Provider Offices Hygenist Dental Chairs Optometrist Eye Lanes Offices Podiatrists Podiatry Offices Exam Rooms Dialysis Stations Audiologists	1 per provider .5 per provider 2.5 per provider 2,008 2 per provider 1 per provider 2,707 1 per provider 2 per provider in clinic - 60% of time in clinic .31 station/patient in 45 hours/week operation 2,008
Other Ambulatory Care Services Dental Optometry Podiatry Dialysis Patients Audiology	Visits Visits Visits	Providers Provider Offices Hygenist Dental Chairs Optometrist Eye Lanes Offices Podiatrists Podiatry Offices Exam Rooms Dialysis Stations	1 per provider .5 per provider 2.5 per provider 2,008 2 per provider 1 per provider 2,707 1 per provider 2 per provider in clinic - 60% of time in clinic .31 station/patient in 45 hours/week operation

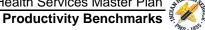


Key Characteristics (KC) are typically the most expensive element within any discipline of care. This table identifies KCs for each discipline as well as the capacity (or productivity benchmark) for each KC.

		Dire	ct Health Care
Discipline	Workload Units	Key Characteristics (KC)	KC Capacity
Behavioral Health			
Mental Health	Visits	Counselors	If mental health population>1000, then (((mental health population/1000)*0.50)+0.040) if not then 0
) (1) I	Counselor Offices	. === 1 !!
Psychiatry	Visits	Providers Provider Offices Exam Rooms	1,720 visits per year
Social Service	Visits	Counselors Counselor Offices	(MSW Counselor inpatient only) If total ADPL<=0,0, if not then ((total ADPL/3)*0.10)+(social service staff) If social service population <=1000 then 0, if not then ((social service population/279)*0.10)+(clerical support) if social services population <=1000 then 0, if not then ((social services population/279)*0.02)
Domestic Violence	Interventions	Counselor Offices Counselors	
		Counselor Offices	
Alcohol & Substance Abuse	Visits	Counselors Counselor Offices	1,720 visits per year
Inpatient Care			
Labor & Delivery	Births	LDRs	.75 adpl + (1.645*sqrt(.75 adpl)
Obstetrics	Patient Days	Post Partum beds	
Neonatology	Patient Days Patient Days	# of Beds # of Bassinets	
Pediatric	Patient Days	# of Beds	adpl + (1.645*sqrt(adpl)
Adult Medical Acute Care	r allone Dayo	# 01 B000	adpi i (iio io odit(adpi)
Cardiology		# of Beds	
Endocrinology		# of Beds	
Gastroenterology		# of Beds	
General Medicine		# of Beds	
Hematology		# of Beds	
Nephrology		# of Beds	
Neurology Oncology		# of Beds	
Pulmonary		# of Beds # of Beds	
Rheumatology		# of Beds	
Unknown		# of Beds	
Medical Patient Day Total		# of Beds	
Adult Surgical Acute Care		# of Beds	
Dentistry		# of Beds	
Dermatology		# of Beds	
General Surgery		# of Beds	
Gynecology		# of Beds	
Neurosurgery Ophthalmology		# of Beds	
Orthopedics		# of Beds	
Otolaryngology		# of Beds # of Beds	
Thoracic Surgery		# of Beds	
		# of Beds	
Uroloav		# ULDEUS	
Urology Vascular Surgery		# of Beds	

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Tucson Area

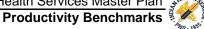


Key Characteristics

Key Characteristics (KC) are typically the most expensive element within any discipline of care. This table identifies KCs for each discipline as well as the capacity (or productivity benchmark) for each KC.

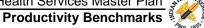
		Direc	ct Health Care
	We will a a si		
Dissiplins	Workload Units	Key Characteristics	VC Canacity
Discipline Intensive Care Unit		(KC)	KC Capacity
	Patient Days	# of beds	adpl + (1.645*sqrt(adpl)
Psychiatry Substance Abuse	Patient Days	# of beds	adpl + (1.645*sqrt(adpl)
Sub Acute / Transitional Care	Patient Days	# 26 2 2 2	- dul . (4 C4F*- out/- dul)
Inpatient Care Totals	Patient Days	# of beds	adpl + (1.645*sqrt(adpl)
inpatient care rotais			
Elder Care			
Nursing Home	Patient Beds	# of patient beds	65+ User Pop X .0181 X 110%
Assisted Living	Patient Beds	# of patient beds	65+ User Pop X .0231 x 110%
Hospice	Patient Beds	# of patient beds	65+ User Pop x .00136 + (<65 x .00006)
Elder Care Totals			
Ancillary Services			
Laboratory Services	Billable Tests	tech staff @ peak	9820 billable tests/peak hours per year
Clinical Lab	Billable Tests	tech staff @ peak	9820 billable tests/peak hours per year
Microbiology	Billable Tests	tech staff @ peak	9820 billable tests/peak hours per year
Blood Bank			
Anatomical Pathology	Billable Tests	tech staff @ peak	9820 billable tests/peak hours per year
Lab Totals		•	
Pharmacy	Scripts	Pharmacists	19,350 scripts per year
Acute Dialysis	Visits	# of beds	624 procedures per bed
Diagnostic Imaging			
Radiographic	Exams	Rooms	6,000
Ultrasound	Exams	Rooms	2,667
Mammography	Exams	Rooms	4,000
Fluoroscopy	Exams	Rooms	2,000
СТ	Exams	Rooms	4,000
MRI	Exams	Rooms	4,000
Diagnostic Imaging Total			
Nuclear Medicine	Exams		
Rad. Oncology Chemotherapy	Exams		
Rehabilitation Services	Exams		
Physical Therapy	Visits		
Occupational Therapy	Visits	•	
Speech Therapy	Visits		
Rehab Total	Visits	Therapy FTE	1,790
Respiratory Therapy	Minutes	# of staff FTE	77,400
Cardiac Catherization Cases	Cases	Rooms	1,200
Home Health Care	Minutes		
		# of Minor	
Outpatient Endoscopy	Cases	Procedure rooms	1,600
Outpatient Surgery Cases			
Cardiovascular	Minutes		85
Digestive	Minutes		85
Endocrine	Minutes		85
ENT	Minutes		45
Gynecology	Minutes		30
Hemic and Lymphatic	Minutes		85
Integument	Minutes		30
Musculoskeletal	Minutes		70
Nervous	Minutes		70
Ocular	Minutes		45
Respiratory	Minutes		85
Urogenital	Minutes		60
OP Surgical Case Total	Cases	Outpatient ORs	1,400

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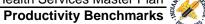
		Direc	ct Health Care
Discipline	Workload Units	Key Characteristics (KC)	KC Capacity
Inpatient Surgery Cases	Cases	Inpatient ORs # of Pre-Op Spaces # of PACU Spaces # of Phase II Spaces	1,000 1 per OR + Minor Rooms 1 per OR 1.5 per OR + Minor Rooms
Surgical Case Total		# 011 flase ii Spaces	1.5 per OR + IMITION ROOMS
Administrative Support			
Administration		# of FTE	(Executive Staff)((if the facility is a hospital or a health center then 4, if not then 0) + (if the facility is a health station or health center, then 0, if not (if the total staff (excluding the driver, executive staff, office services, financial management, staff health, and material management) < 250, then 0, if not then (total staff number (excluding the driver, executive staff, office services, financial management, staff health, and material management, staff health, and material management)-250)/250))+((if the facility is a health center or health station then 2, if not then 0) + (if the facility is not health center or health station, then 0, if not then (if the total staff count < than 100, then 0, if not then (if the total staff count (excluding the driver, executive staff, office services, financial management, staff health, and material management)-100)/(100*1)+(Administrative Support Staff)If the facility is a hospital or medical center, then 2, if not then 0)+(If the facility is not a hospital or medical center, then 1, if not then 0).
Information Management		# of FTE	1 + (if(PCPVs + total inpatient days) > 4400, then ((PCPVs+total inpatient days)/10000)*0.60) if not then 0)

Tucson Area

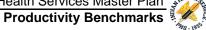


Key Characteristics

		Dire	t Health Care		
D	Workload	Key Characteristics			
Discipline	Units	(KC)	KC Capacity		
Health Information Management		# of FTE	(Medical Records technicians) (If the facility is a hospital or a health center, then the total patient days (general medicine, OB/GYN, surgery, peds, new born, ICU/CCU)/365), if not then 0)+((primary care provider visits/4550)*1)+(Medical Records Technician (CHA/P))(CHP Ambulatory Encounters / 40,000) *1+(PCC Supervisor)((PCC data entry personnel / 4) *1)+(PCC data entry personnel)if (or(the facility is a hospital, or medical center) the (O.P WKLDP10 +1.952 * inpatient population)/(if the facility is a health station or health center, then (O.P.WKLDP10 +1.92*Ambulatory Inpatient Population)/1600) if not then 0) + P 10= If the facility is a health center, then OPVs to H.C), if not then (if the facility is a hospital or health center, then OPVs to a hospital, if not (RRM calculation PCPVs /0.8) + (OPVs to hospital = If the facility is a hospital or medical center, then (RRM Calculation PCPVs * HOSP OPV FCTR)) + (OPVs to H.C = If the facility is a health center, then RRM calculation PCPVs * MMB OPV FCTV, if not then RRM calculation PCPVs /0.8) + (Coder) (if the facility is a hospital or medical c		
Business Office		# of FTE	(Business Manager) (if the facility has outpatient visits then 1, if not then 0)+((Patient registration Tech) ((if inpatient admissions - override cell > inpatient admissions - calculated cell then inpatient admissions - override cell/2000) * 1) + (if outpatient visits > 20000 then (outpatient visits-20000)/(10000 * 0.5) if not, then 0) + (Benefit Coordinator) ((if outpatient visits more then 10000, then (outpatient - 10000 * 1) if not then 0)+(Billing Clerk) (if inpatient admissions-override cell > inpatient admissions-calculated cell), then (if inpatient admissions override cell < 0, then 0, if not then ((inpatient admissions override cell/2000)*1) if not (if inpatient admissions-calculated cell < 0 then 0, if not, then ((inpatient admissions calculated cell / 2000) * 1) + (if primary care provider visit > 10000, then ((primary care provider visit - 10000) / 10000) * 1, if not then 0)		



		Dire	ct Health Care
Discipline	Workload Units	Key Characteristics (KC)	KC Capacity
Contract Health		# of FTE	(CHS Staff) If number of CHS purchase orders < 100, then 0, if not then (number of CHS purchase orders/2000) *1)+(Utilization Review) ((CHS purchase orders/10000) * 1)+(CHS Manager) If (CHS purchase orders > 100 ,then 1 if not ,then 0)
Facility Support Services			
Durable Medical		# of FTE	
Clinical Engineering		# of FTE	0.5+(if the facility is a hospital or medical center, then 1 if not ,then 0)+((PCPVs/2500)*0.30)+(Total ADPL /50000) + ((OPVs/325000)*0.50)+((ER After hours PCPVs/85000)* 0.50) + ((dental population/10000000)*0.5)+((Projected # of delieveries/5000)*0.50)+(((IN.P. surgical cases+IN.P. GYN. Surgical cases)/5500)*0.5)+((Projected # of delieveries/5000)*0.50)+(((IN.P. surgical cases+IN.P. GYN. Surgical cases+IN.P. GYN. Surgical cases)/5500)*0.5)+((Total ADPL/10000)*0.50)+((Total ADPL/10000)*0.50)+((PCPVs/65000*050)+((ER After hours PCPVs/17000)*0.50)+((dental population/20000000)*50*95)
Facility Management		# of FTE	0.5+(If the facility is a medical center or a hospital, then 2 if not ,then 0)+(New born ADPL/1*0.50)+ (if acres of ground <= 0, then calculated acress/7.5*1)+if (Total space - IN.P treatment space) <= 1500, then ((Total space -IN.P treatment IN.P treat treatment space)/16500), if not then ((total space-IN.P. treatment space)/13000)) + Quarters #
Central Sterile		# of FTE	(Central Supply Staff) *0.67 +(total nurse stations *0.67+(Medical Technician) If surgery days > 0, then 1 if not then 0
Dietary		# of FTE	(Registered Dietian) (If the facility is a hospital or medical center, then 1,if not then 0)+(Food Services Staff) If the facility is a hospital or medical center, then (if FAC INFO T43=1, then 0.345*OR cases, if not then 0.315*OR cases), if not (if OR cases are less or equal to 5, then 0, if not then (if FAC INFO T43=1then OR cases * 0.4 + 2, if not then 0.258 * OR cases +2)))
Property & Supply		# of FTE	(Total RRM staff/75)*1
Housekeeping & Linen		# of FTE	(If the facility is a health center or health station then 2, if not, then 0) + (If ADPL < 21, then ADPL/7), if not then (((total ADPL - 21)/10)+21/7) + (total space/10000)



	Direct Health Care												
Discipline	Workload Units	Key Characteristics (KC)	KC Capacity										
Preventative Care													
Health Promotion / Disease Prevention (Preventive Care)		# of FTE											
Public Health Nursing			(Public Health Nurse Manager) (If PHN population>1250 then 1, if not, then 0)+(Public Health Nurse) (1.38+(PHN population/1250))+0+if (PHN Population<1250, then 0, if not, then ((#of weekly one hour PHN managed clinics/1)*0.03)+(((if # of CHRs supervised < 5, then 0, if not then (# of CHRs supervised-5)/10)*1)+(Public Health Nurse - Home Health Care) (if home health case =1, (0.2*(PHN pop./1250)) if not then 0) + (Public Health Nurse - School) (if PHN school=3, then 0, if not, then (0.07*PHN population)/1250)+(Clerical Support)((0.2*PHN pop)/1250)										
Public Health Nutrition			(If Nutrition population < 1400, 0) if not then ((Nutrition population/100)*0.3)+0.3										
Environmental Health													
Health Education			(If health education population<2000, then 0) of not then (if health education population <= 400, then 1 if not ,then (((health education population-4000)/4000)+1)										
Case Management	Cases	# of FTE	1 per 2400 User Pop or 1 per 2 PC Providers										
Epidemiology		# of FTE	<u> </u>										

Appendices



Appendix C Tucson Area CHS Cost Calculations



CHS Cost Calculations

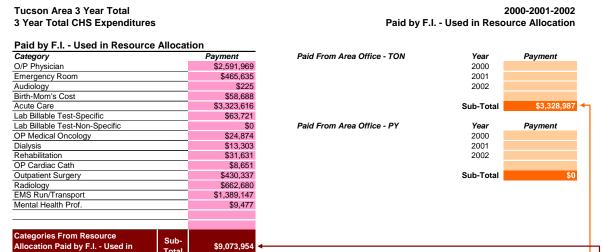


Appendix C - CHS Data and the CHS Multiplier

In the effort to predict the future burden of CHS costs on the Service Units in the Tucson Area, it is important to determine the past experience on a unit of service basis. This allows us to predict future CHS costs when these "unit of service" costs can be multiplied by the predicted new workloads for the expanded population. We are generally successful in finding reliable measures; but in some cases, variable definitions do not lend themselves to finding comparable measures across all Service Units. When we do not have reliable data defined uniformly across Service Units, we can still estimate the costs of these services by knowing what ratio they are to the whole of CHS expenses for the Area.

For example, we know that the Tucson Area, through their F.I., expended \$9,457,108 for the years 2000, 2001, & 2002. We have broken down that total, with the help of the Area CHS Office and the F.I., into defined amounts, allowing us to determine unit of service costs for most of the service lines identified on the Resource Allocation Section of the Master Plan Primary Service Area report. These are listed on the table below and total \$9,073,954. There are three categories where the information could not be defined in reliable numerators or denominators, so we could not separate out reliable unit of service costs. These categories total \$383,154. There was \$0 which could not be classified into the categories. There was also \$3,328,987 paid directly by the Area Office, rather than the F.I. The table below identifies each of these totals.

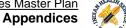
In order to calculate the future CHS demand, we determine what the ratio of the unmatched amounts, (Paid by F.I. not included in the Resource Allocation, Not Classified, and Paid by Area Office) are to the amount paid by the F.I. In the Tucson Area this ratio is 41%. We refer to this as the Area CHS Multiplier. We can then take the CHS estimate by service line, and apply the Area Multiplier, thereby predicting the total CHS burden for the year 2015.



Total Paid by F.I. - Not Used In Resource Allocation Category Payment \$57,384 Podiatry Optometry Dental \$325,770 **Categories From Resource** Sub-\$383,154,00 Allocation Paid by F.I.-Not Used In Total Resource Allocation Paid by F.I.-Not in Detail Table \$0 \$9,457,108 Total Paid by F.I

Paid by F.I.-Not Used In Resource Allocation 383.154 Paid by F.I.-Not in Detail Table Paid From Area Office - TON Paid From Area Office - PY Sub-Total \$3,712,141 Paid by F.I.-Used in Resource Allocation Total Paid by F.I. not used in Resource Allocation, plus Total Paid from Area Office. divided by Total Paid by F.I. Used in Resource Allocation [or... (Sub-Total 1/Sub-**Area CHS Multiplier** 41%

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Appendix D Tucson Area HFCM Database

Tucson Area



	Comparison	Facility Deficiency											Health Resources							ion Service		Facility Size							Composite Scoring Options			
Service Area	Option 1 Rank Option 2 Rank Option 3 Rank Option 4 Rank	Age Facility	Age Factor (AF)	Deficiency Cost	CF	Existing Space	Option 1 - Required Space	Option 2 - Required Space	Condition Factor (CF)	Space Factor (SF)	AES - Adjusted Existing Score	Scoring Option 1 - (400 pts. Possible)	Scoring Option 2 - (400 pts. Possible)	FDI	Scoring Option 1 - (200 pts. Possible)	% of Pop. over 55	Composite Poverty Index	Poor Health Status Index	Scoring Option 2 - (200 pts. Possible)	Kilometers	Scoring (100 pts Possible)	2015 User Pop	Option 1 Calc	Facility Size Factor	Scoring Option 1 - (150 pts Possible)	Option 2 HSP	Facility Size Factor	Scoring Option 2 - (150 pts Possible)	Total Option 1 (850 pts. Possible) SR1+H1	Total Option 2 (850 pts. Possible) SR1+H2	Total Option 3 (850 pts. Possible) SR2+H1	Total Option 4 (850 pts. Possible) SR2+H2
Sells Service Unit	-										·																_					
Ajo/Why Proposed PSA	1 1 1 1		0.0000	\$1,746.00	0.0000	0	1,086	1,124	0.0000	0.0000	0	400	400	49.4	-97	17.4%	29%	94%	94	116.0	100	1,108	1,086	1.0000	150	1,124	1.0000	150	553	744	553	744
North Proposed PSA	4 4 4 4		0.0000	\$1,782.00	0.0000	0	638	333	0.0000	0.0000	0	400	400	49.4	-97	11.9%	29%	94%	90	3.2	0	548	638	1.0000	150	333	1.0000	150	453	640	453	640
Santa Rosa Health Center	3 3 3 3	45	0.0125	\$220,967.58 \$1,746.00	0.3649	347	1,610	1,439	0.3649	0.3774	216	346	340	49.4	-97	12.8%	29%	94%	91	56.0	62	1,763	1,610	0.9754	146	1,439	0.9857	148	458	645	453	641
San Xavier Health Center	5 5 5 5	72	0.5000	\$1,676,562.58 \$1,746.00	0.1892	5,076	8,246	8,070	0.1892	0.6892	1,578	323	322	49.4	-97	24.2%	29%	94%	98	17.5	0	10,057	8,246	0.6039	91	8,070	0.6114	92	317	512	317	512
Sells Hospita	8 8 6 7	44	0.0125	\$2,518,218.23 \$1,746.00	0.1874	7,694	5,756	14,765	0.1874	0.1999	6,156	-28	233	49.4	-97	14.2%	29%	94%	91	0.0	0	6,945	5,756	0.7266	109	14,765	0.3249	49	-16	173	185	373
Pisinemo/Westside Health Center	2 2 2 2		0.0000	\$15,640.89 \$1,746.00	0.0850	105	980	1,152	0.0850	0.0850	96	361	367	49.4	-97	17.6%	29%	94%	94	79.8	89	975	980	1.0000	150	1,152	1.0000	150	503	693	508	699
Yaqui CHS													•									•									•	
Pascua Yaqui Health Center	7 7 8 8		0.0000	\$1,746.00	0.0000	2,895	5,514	5,050	0.0000	0.0000	2,895	190	171	66.6	-131	8.7%	27%	94%	86	22.0	0	6,642	5,514	0.7412	111	5,050	0.7690	115	170	388	155	373
Tucson Indian Center	6 6 7 6		0.0000	\$1,746.00	0.0000	889	1,733	1,369	0.0000	0.0000	889	195	140	66.6	-131	12.2%	27%	94%	89	3.1	0	1,916	1,733	0.9680	145	1,369	0.9899	148	209	429	158	378

Facilities Scoring Master - Tucson Area
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